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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/518,678	03/03/2000	Wayne Xin	XIN 3	5710

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05/22/2003

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EXAMINER

SMITH, SHEILA B

ART UNIT

PAPER NUMBER

2681

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Commissioner for Patents

**Office Action Summary**

Application No.

09/518,678

Applicant(s)

WAYNE XIN

Examiner

Sheila B. Smith

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claim 1 recites a mobile satellite positioning system receiver. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 23,25,26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watters et al. (U. S. Patent Number 5,982,324) in view of Fisher et al. (U.S. Patent Number 6,295,455).

*Regarding claims 1, 2, 23,* Watters et al. discloses essentially all the claimed invention as set fourth in the instant application, further Watters et al. discloses combining GPS with toa/tdoa of cellular signals to locate terminal, in addition Watters et al. discloses a wireless communications system, a base station location determining system comprising: a fixed satellite

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positioning system receiver (1005 and 1100); predetermined location coordinates of said satellite positioning system receiver (which reads on column 5 lines 40-46) ; and a module which determines a difference between a location signal received by said satellite positioning system receiver and said predetermined location coordinates (1015) exhibited in figure 10 and figure 11, a mobile satellite positioning system receiver (1025), a combiner combining difference with a mobile position signal determined by mobile satellite positioning system receiver (1126) (which reads on column 19 lines 43-46). However, Watters et al. fails to specifically disclose a transmitter for transmitting combined value during a telephone call.

In the same field of endeavor, Fisher et al. further discloses methods and arrangements for locating a mobile telecommunications station. In addition Fisher et al. discloses transmitting during a telephone call as disclosed in column 3 lines 24-26.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Watters et al. by modifying a different GPS and or glonass with transmitter for transmitting combined value during a telephone call as taught by Fisher et al. for the purpose of determining an approximate geographical location of the mobile station.

**Regarding claims 3, 26,** Watters et al. discloses everything claimed, as applied above (see claim 1) additionally, Watters et al. discloses a wireless communications system, a location determining system is a cellular telephone (1010 ) (which reads on column 19 lines 48-49).

**Regarding claims 4, 5, 25,** Watters et al. discloses everything claimed, as applied above (see claim 1) additionally, Watters et al. discloses a wireless communications system, a wireless communications system, a location determining system wherein satellite positioning

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system is a GPS system receiver location determining system (1005 ) (which reads on column 19 lines 48-49).

**Regarding claim 6** , Watters et al. discloses everything claimed, as applied above (see claim 1) additionally, Watters et al. discloses a wireless communications system, a location determining system and a database containing at least one geological correction with respect to a location of said satellite positioning system receiver (disclosed in column 5 lines 30-50.)

**Regarding claim 7** , Watters et al. discloses everything claimed, as applied above (see claim 1) additionally, Watters et al. discloses a cellular telephone handset having a navigational satellite system capability; wherein a location determined by said cellular telephone handset is correctable by said difference between said location signal received by said satellite positioning system receiver of said base station and said predetermined location coordinates (which reads on column 19 lines 48-62).

3. Claims 8-10,13-15, 18-22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watters et al. in view of Fisher et al. and further in view of Schipper (U. S. Patent Number 5,986,603).

**Regarding claims 8, 21** , Watters et al. in view of Fisher et al. discloses everything claimed, as applied above (see claim 1) additionally, Watters et al. discloses a wireless communications system, However, Watters et al. fails to specifically disclose a location determining system and difference comprises a longitude difference and a latitude difference.

In the same field of endeavor, Schipper further discloses geometric utilization of exact solutions of the psedorange equations. In addition Schipper discloses location determining

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system and difference comprises a longitude difference and a latitude difference disclosed in column 1 lines 26-30 and column 2 lines 55-60.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Watters et al. by modifying a different GPS and or glonass with wireless communications capability with a transmitting said highly accurate location information to a called party during an emergency telephone call as taught by Schipper for the purpose of providing for a lookup technique for position location

***Regarding claims 9, 22, 24***, Watters et al. in view of Fisher et al. discloses everything claimed, as applied above (see claim 1) additionally, Watters et al. discloses a wireless communications system, a location determining system and difference further comprises an altitude difference (disclosed in column 2 lines 11-12.)

***Regarding claims 10,13,14, 15,18, 19, 20***, Watters et al. in view of Fisher et al. discloses everything claimed, as applied above (see claim 1) additionally, Watters et al. discloses a method of improving an accuracy of a received navigational. satellite signal in a cellular telephone handset, comprising: receiving location information from a navigational satellite System as disclosed in column 5 lines 52-67, and a differential GPS correction signal relating to an error in said received location information; and combining said location information and said differential GPS correction signal to generate highly accurate location information as disclosed in column 23 lines 5-17.

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4. Claims 11,12, 16,17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watters et al. in view of Fisher et al. and further in view of Schipper (U. S. Patent Number 5,986,603) and further in view of Green Jr. (U. S. Patent Number 5,926,133).

*Regarding claims 11,12, 16,17*, Watters et al. in view of Fisher et al. further in view of Schipper discloses everything claimed, as applied above (see claim 1) additionally, Watters et al. discloses a method of improving an accuracy of a received navigational satellite signal in a cellular telephone handset, comprising: receiving location information from a navigational satellite System as disclosed in column 5 lines 52-67. However, Watters et al. fails to specifically disclose transmitting said highly accurate location information to a called party during an emergency telephone call.

In the same field of endeavor, Green Jr. further discloses differentially corrected position location system and method for mobile communication networks. In addition Green Jr. discloses transmitting said highly accurate location information to a called party during an emergency telephone call in column 1 lines 26-30 and column 2 lines 55-60.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Watters et al. by modifying a different GPS and or glonass with wireless communications capability with a transmitting said highly accurate location information to a called party during an emergency telephone call as taught by Green Jr. for the purpose of providing for a lookup technique for position location.



***Response to Arguments***

5. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

***Citation of Pertinent Prior Art***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Reed** (U. S. Patent Number 6,275,707) discloses Method and apparatus for assigning location estimates from a first transceiver to a second transceiver;

**Bork et al.** (U. S. Patent Number 6,246,376) discloses Wireless location and direction indicator for multiple devices;

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (703)305-0104. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 703-305-4778. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)308-6296 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-9700.

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S. Smith  
May 17, 2003



DWAYNE BOST  
SUPERVISORY PATENT EXAMINER  
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